### Quotation Advert leelth Opening Date: 2019-05-13 He. Closing Date: 2019-05-27 119 Closing Time: 11:00 INSTITUTION DETAILS Institution Name: V King Edward VIII hospital Province: KwaZulu-Natal Department of Health Department or Entity: Central Supply Chain Management Division or section: Place where goods / services is required KING EDWARD VIII HOSPITAL MAINTENANCE Date Submitted 0 2019-05-09 ITEM CATEGORY AND DETAILS **Quotation Number:** ZNO: KM 06\19 Item Category: V Services

CLEANING OF DIESEL TANKS FOR 2019\2020 AS PER SPEC
\*QUOTES TO BE HANDED OUT AFTER SITE MEETING

V

Quantity (if supplies)

Item Description:

4

### COMPULSORY BRIEFING SESSION / SITE VISIT

Select Type:

Compulsory Briefing Session

Date:

2019-05-20

Time:

13H00

Venue:

KING EDWARD VIII HOSPITAL

QUOTES CAN BE COLLECTED FROM:

KHULANI MTHEMBU

QUOTES SHOULD BE DELIVERED TO:

KING EDWARD VIII HOSPITAL TENDOR BOX

ENQUIRIES REGARDING THE ADVERT MAY BE DIRECTED TO:

Name:

KHULANI MTHEMBU

Email:

KHULANI.MTHEMBU@KZNHEALTH.GOV.ZA

Contact Number:

031 360 3446

Finance Manager Name:

MISS NOMONDE NEUME

Finance Manager Signature:

No late quotes will be considered

# TECHNICAL REQUIREMENTS AND SCOPE OF WORK FOR IN-SITU DIESEL FUEL STORAGE TANK CLEANING AND DIESEL FUEL REMEDIATION

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# TECHNICAL REQUIREMENTS AND SCOPE OF WORK

# FOR IN-SITU DIESEL FUEL STORAGE TANK CLEANING

# AND DIESEL FUEL REMEDIATION

# NOTE TO CONTRACTORS

- No subcontracting of this service shall be allowed. Failure to comply shall result in the disqualification of this bid.
- Failure to complete all the relevant documentation in its entirety shall result in the disqualification of this bid.
- The KwaZulu-Natal Department of Health Infrastructure Development Directorate reserves the right to inspect the Contractors diesel fuel cleaning equipment and associated material, staff accreditation documents and valid Safety File at the Contractors premises prior to the awarding of any bids or BEFORE the commencement with any services.

# TECHNICAL REQUIREMENTS (Contractor to ensure):

- Compliance with all legislated safety requirements pertaining to in situ sampling, diesel tank cleaning, fuel remediation and DOH site specific requirements.
  - These safety requirements shall comply with SANAS 10089 for in-situ underground bulk diesel fuel tanks and SANAS 11089/1 for in-situ aboveground bulk diesel fuel tanks.
- 2) Only proven accredited tank cleaning and fuel remediation equipment and technology to be utilised that has:
  - A processing flow rate of no less than 1:8 to tank volume ratio.
  - · Full spectrum water extraction capability (free, entrained and emulsified).
  - · BV accredited or similar Induction Conditioning fuel remediation technology.
  - Three phase filtration and separation filtration down to 3 micron.
  - · Metallic particulate extraction.
- Service personnel shall be trained, experienced and accredited tank cleaning operators suitably skilled in system operation, fuel remediation procedures and safety requirements.
  - Certified copies of all training documentation shall be provided at time of tender.
- A process that results in minimal waste/disposal of fuel of less than 1% of tank capacity (excluding water sludge and inorganic debris).
- 5) All contaminated disposable fuels and materials shall be disposed of at an accredited site. Original documentation shall be provided to the KwaZulu-Natal Department of Health at the time of invoicing for work done. Failure to comply shall result in the delay of these payments.

# SCOPE OF WORK:

# Upon commencement of the service the appointed Contractor shall do the following:

- Draw two bottom diesel tank samples of the diesel fuel prior to the commencement of the cleaning of the tanks. Samples shall be drawn utilising recognised diesel tank sampling equipment as per the DN10/07 procedure.
- Samples shall be drawn from the tanks and sealed in the presence of the KwaZulu-Natal Departments Institutions Chief Artisan or his/her authorised designee.

The drawn samples shall be signed off by the relevant KZN Department of Health Institutions Chief Artisan or his/her authorised designee.

- 3. Samples shall be clearly labeled detailing, date, location and tank type and volume.
- One sample to be supplied to the KwaZulu-Natal Departments Institutions Chief Artisan or his/her authorised designee.
- Provide tank cleaning and fuel remediation services to the diesel tanks which will remove/remediate the following:
- a) Tank bottom debris
- b) Free, Entrained and Emulsified water
- c) Solid contaminants
- d) Bio-film build-up / accumulation on tank walls and if applicable on baffles, supports
- Remediation of the fuel to comply with SANS 342 (excluding Sulphur content compliance and raising of flashpoint levels)
- f) The Contractor shall provide specification sheets of tank cleaning equipment to be utilised.
- g) The Contractor shall provide a list of chemicals and dosage ratios to be used in the tank cleaning and fuel remediation process utilising the MSDS sheets.

# Upon completion of the service:

- Draw samples again as per items 1 to 4 above and provide a sample to KwaZulu-Natal Departments Institutions Chief Artisan or his/her authorised designee. The other to be sent for SANS 342 laboratory analysis from a recognized laboratory.
- The Contractor shall provide the name of the independently recognised test laboratory that shall be testing the diesel fuel samples.
- Provide written confirmation of completion and successful remediation and cleaning per tank.
- Record the volume of waste generated from each tank, remove from site and arrange for disposal at an accredited waste disposal facility.

- Obtain departments duly appointed site representative signature on an appropriate document confirming the above per tank.
- 6) Provide an Independent SANS 342 laboratory analysis from a recognized accredited laboratory confirming fuels remediation status per tank (excluding Sulphur content compliance and raising of flashpoint levels).
- Provide a waste disposal certificate confirming waste has been received from an accredited waste disposal facility for such waste.

Confirmation of Co	ompliance		
I (full name)			
Company Reg. No. Hereby confirm that	t I/we have read	the requirements o	of this specification and will fully comply
perform the task.	n. I/We further co	onfirm that I/We ha	ave the required technology and skills to
Dated this	day of	20	at
Signature:			
Witness:			
Name		Signature	

# **Emergency Power Generator Diesel Fuel Analysis Report**

SANS 17025: 2005

57410 11023. 2003
Institution:
Tank Type and Capacity:
(One report per tank)
Tonk Sprint / Defense N. J.
Tank Serial / Reference Number:
Name of Company conducting cleaning regime and collecting of samples:
Name of Technician:
Sample Date:
Received Date:
Reported Date:
Type of Sample Container used:
Volume of sample taken in ml:
Fuel Sample ID Code:
Name of Laboratory conducting testing regime:
SANAS Accreditation Number:
Name of Technician:
Sample Date:
Received Date:
Reported Date:

NOTE: One test analysis sheet to accompany each individual fuel sample.

Each test analysis sheet and fuel sample to have the same ID code.

Test results shall be returned to the relevant institution and a copy thereof supplied to the office of the Manager - KZN DoH Infrastructure Development <u>prior to payment</u> being made to the Service Provider.

Provide a certificate stipulating volumes of waste contaminant removed from each tank and a safe disposal certificate from an accredited waste disposal facility for such waste. A copy thereof supplied to the office of the Director - KZN Department of Health: Infrastructure Development – Maintenance and Engineering sub-directorate.

# **Test Results**

Tests	Sample No:		SANS 342:2006 Specification	
	Results	Units	Limits	Comments
Density @ 20oC (ASTM D 7042)*		Kg/L	0.800min	
Viscosity @ 40°C (ASTM D7042*		cST	2.2-5.3	
Flashpoint (ASTM D 93)*		оС	55 min	
Water Content (ASTM D604)		%	0.05 max	
90% Recovery Temp. (ASTM D86)*		oC	362 max	
Total Contamination (IP40)*		Mg/Kg	24 max	
Sulphur (ASTM D4294)*		ppm	500 max	
Residue (ASTM D86)*		- %		
Cetane Index (ASTM D976)*				
* Not an Accredited SANAS Method				

# Visual Inspection / Additional Tests

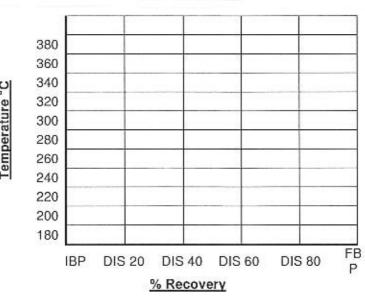
	Unit	Result	Comments
Free Water			
Colour			
Appearance			
Bacteria Content			
Total Acid Number	mgKOH/g	1	
IP Contamination			

# Distillation & Graph

# Insert reading in relevant column on left and project values onto the graph on right

# **Distillation Data**

IBP	
10	
20	
30	
40	
50	
60	
70	
80	
90	
FBP	
Rec %	



# Diagnosis / Remarks

RESULT: PASS / FAIL (d	rircle relevant item)	
Namo & Signaturo	Date:	,
Name & Signature Laboratory Technician		Company Stamp

# DIESEL FUEL TANK AND DIESEL FUEL CLEANING REGIME FOR IN-SITU STORAGE TANKS.

# WORK METHOD STATEMENT

Upon arrival on site: Explain procedures to be followed.
<u>Drawing of diesel fuel sample:</u> Explain procedures to be followed.
Setting up and commencement of diesel fuel cleaning process: Explain the procedure to be followed.

After completion of diesel fuel cleaning process: Explain the procedure to be followed.
Signature of Contractor:
Name of Contractor:
Contractors Company Stamp:

## Permission to Commence Work / Control Sheet Checklist

# Items to confirm prior to issuing authorisation to commence with service

- Tank cleaning equipment to be utilised conforms to the DOH Specification, Copies of Tank Cleaning Equipment Specification Sheets to be provided
- 2) Service personnel's accreditation documentation
- 3) Health & Safety File
- 4) Material Safety Data Sheets of Chemicals to be utilized.

Confirmation of C	ompliance			
I (full name)				hereby
in compliance with	pected the abovemention the specification. The Coper Order No.:	ontractor is hereby pe	ermitted to com	mence with the
Dated this	day of	20	at	
Signature:	E	- W		